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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,906	06/22/2001	Dominik J. Schmidt		7458

38236 7590 01/25/2005

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EXAMINER
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GELIN, JEAN ALLAND

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/887,906

**Applicant(s)**

SCHMIDT, DOMINIK J.

**Examiner**

Jean A Gelin

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,7-14 and 21-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,7-14 and 21-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This is in response to the Applicant's Request For Continued Examination (RCE) filed on December 06, 2004 in which claims 1, 3, 5, 8, 9, 11-14 have been amended, claims 21-29 have been added, and claims 2, 4, 6, and 15-20 have been canceled. Claims 1, 3, 5, 7-14, and 21-29 are currently pending.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 11-14, and 25-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosener et al. (US 2002/0028655).

Regarding to claims 11, 25, Rosener teaches a mobile terminal, comprising: a plurality of processing units (i.e., phone 101 typically includes at least a processor to process short range and one to process the cellular range (section 0060); a long-range transceiver coupled to the processing units, the long-range transceiver tot communicate over cellular frequency channels (RF interface to communicate with base stations outside of the car when the user is outside of the car, sections 0060, 0094 0104); a short-range transceiver coupled to the processing units to communicate over a short range radio channel (bluetooth interface to communicate inside the car, section 0060);

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and means for bonding a plurality of the cellular channels and the short-range radio channel to communicate data from the mobile terminals (i.e., when inside the car the combination of bluetooth and the RF interface allows the user to communicate, section 0060, 0118-0119).

Regarding to claims 12, 26, Rosener teaches wherein the plurality of processing units comprises a reconfigurable core that includes one or more digital signal processors (DSPs) (section 0089, 0091, claim 17).

Regarding to claims 13, 27, Rosener teaches wherein the reconfigurable processor core includes one or more reduced instruction set computer (RISC) processors (claim 17 and fig. 9).

Regarding to claims 14, 28, and 29, Rosener teaches comprising a router (T28 GSM bonded with cellular frequencies and short-range, section 0060) coupled to the reconfigurable processor core (to switch from direct RF interface to the use bluetooth interface, section 0118-0119).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn et al. Dunn (US 5,625,877) in view of Rosener et al. (US 2002/0028655).

Regarding to claim 1, Dunn teaches a method comprising: requesting an allocation of preferably adjacent cellular frequency channels from a mobile station to a base station (i.e., portable terminal demands the master microprocessor for available radio channels, col. 7, lines 5-37, col. 8, lines 23-44); allocating available frequency channels in response to the request from the mobile station (the master allocates channels based on the demand, col. 8, lines 24-67); and bonding the available frequency channels to communicate data (corresponding to aggregation of available channels is accomplished, communication between the portable terminal and the master is taken place, col. 8, lines 1-67, for sending large amount of information over aggregating available radio channels, col. 6, lines 1-62).

Dunn does not specifically teach bonding a short-range radio channel to the cellular frequency channels; and communicating over the bonded cellular and radio channels using short-range radio protocol and cellular protocol.

However, the preceding limitation is known in the art of communications. Rosener teaches the Bluetooth interface communicates with the wireless device inside the car and RF interface communicates with the base station outside the car (i.e., using the T28 GSM, the short-range radio and cellular channels are bonded to provide path link for the transmission of data between the wireless phone 101 and the base station 105, sections 0060 and 0069-0077). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the technique of Rosener within the system of Dunn in order that when a phone's user carrying on a conversation enters a car embedded with the T28 GSM phone and the signal strength is

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dropped, the mobile station handoff to repeater and the user continues his normal conversation (sections 0118-0119). The cellular frequency and the short range are bonded to allow communication between the wireless phone 101 and the base station 105 when the user is inside the vehicle.

Regarding claim 3, Dunn in view of Rosener teaches all the limitations above. Rosener further teaches communicating on a short-range radio channel wherein the short-range radio channel is Bluetooth (when inside the car and the signal strength dropped, the phone uses short-range bluetooth interface to communicate, sections 0118-0119).

Regarding to claim 23, Dunn in view of Rosener teaches all the limitations above. Rosener further teaches deallocating the available frequency channels after communicating the data (release channel is a typical process after completing a call, section 0076).

6. Claims 5, 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn et al. in view of Rosener further in view of Park (US 6,081,168).

Regarding to claim 5, Dunn in view of Rosener teaches all the limitations above except wherein the cellular channels comprise an uplink band around 890 - 915 MHz and a downlink band around 935 - 960 MHz.

However, the preceding limitation is known in the art of communications. Park teaches GSM has separate transmission and reception frequencies wherein an uplink band around 890 - 915 MHz and a downlink band around 935 - 960 MHz (col. 1, lines 18-24). Therefore, it would have been obvious to one of ordinary skill in the art, at the

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time the invention was made, to implement the techniques of Park within the system of Dunn in view of Rosener in order to use a channel path for transmission and another channel path for reception; thus, reducing collision and interference over the communication channel.

Regarding claim 7, Dunn in view of Rosener in view of Park teaches all the limitations above. Park further teaches wherein each band is divided into 124 pairs of frequency duplex channels with 200 kHz carrier spacing using Frequency Division Multiple Access (FDMA) (col. 1, lines 30-57).

Regarding claim 8, Dunn in view of Rosener further in view of Park teaches all the limitations above. Park further teaches splitting the 200 kHz radio channel into a plurality of time slots (col. 1, lines 33-52); bonding the time slots, and transmitting and receiving data in the bonded time slots (col. 1, lines 33-52).

Regarding claim 9, Dunn in view of Rosener in view of Park teaches all the limitations above. Park further teaches the 200kHz radio channel using time division multiple access (TDMA) (col. 1, lines 33-53).

Regarding claim 10, Dunn in view of Rosener further in view of Park teaches all the limitations above. Dunn further teaches comprising transmitting cellular packet data conforming to one of the following protocols: cellular digital packet data (CDPD) (for AMPS, IS-95, and IS-136) (inherently present in col. 10, lines 20-55).

7. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn et al. in view of Rosener further in view of Widegren (US 6,374,112).

Regarding to claims 21, 22, Dunn in view of Rosener teaches all the limitations above except bonding the short-range radio channel with the cellular frequency channels dynamically based on traffic or on a priority of service.

However, the preceding limitation is known in the art of communications. Widegren teaches allocating channel based on quality of service and current traffic condition (col. 15, line 57 to col. 16, line 8). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to implement the technique of Widegren within the system Rosener in order to select how to transmit information based on quality and load.

8. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn et al. in view of Rosener further in view of Menard et al. (US 6,563,910).

Regarding to claim 24, Dunn in view of Rosener teaches communicating information simultaneously over the bonded cellular and short-range radio channels, as disclosed in claim 1 above. Dunn in view of Rosener fails to teach simultaneous transfer of data and voice information over radio channels.

However, the preceding limitation is known in the art of communications. Menard teaches voice and data communication over radio network (col. 10, lines 20-63). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the technique of Menard within the system of Dunn in view of Rosener in order to transmit voice and image from the location of an emergency event for better assistance.



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***Conclusion***

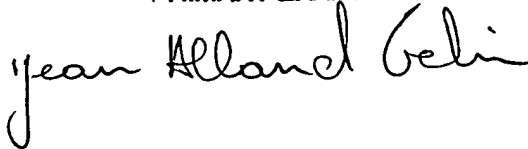
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A Gelin whose telephone number is (703) 305-4847. The examiner can normally be reached on 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R Hudspeth can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**JEAN GELIN**  
**PRIMARY EXAMINER**

JGelin  
1/21/2005

A handwritten signature in cursive script that reads "jean Allard Gelin". The signature is written in black ink and is positioned below the printed name and title of the examiner.